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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,383	08/05/2003	Christopher P. Desmarais	102513.57840US	8211
23911 7590 06/15/2007 CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300			EXAMINER KIM, SUN U	
			ART UNIT 1723	PAPER NUMBER
			MAIL DATE 06/15/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/634,383

**Applicant(s)**

DESMARAIS, CHRISTOPHER P.

**Examiner**

John Kim

**Art Unit**

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 4/30/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-15 and 24-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-15 and 24-27 is/are rejected.
- 7) ☒ Claim(s) 25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-6 and 8-9 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The filter media having a central opening, the end supporting a second tube in fluid communication with the cavity, a third tube at other end of the housing in fluid communication with the central opening are critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Without the filter media (32) having a central opening (52), the end (15) supporting a second tube (18) in fluid communication with the cavity (30), a third tube (20) at other end of the housing (12) in fluid communication with the central opening (52), the fluid to be filtered cannot flow into the second tube (18) i.e. inlet tube and the filtered fluid cannot flow out to the third tube (20) i.e. an outlet tube as intended (see Figures 1-2). Without above structural elements, the claimed apparatus would not work as intended since no inlet tube for providing fluid inflow and an outlet tube for filtered fluid exit are provided. See paragraphs 0014-0019 for the essential need of above structures.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 8-10, 12-13, 24 and 26-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Hodgkins (US Patent No. 6,248,236 B1).

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Regarding Claim 1, Hodgkins discloses a fluid filter assembly comprising: a housing (16) having an end (12) and defining a cavity; a first tube (28) supported by the end (12) and in fluid communication with the cavity; a diverter arranged within the cavity and including first and second sides with the first side proximate to the end (12), the diverter including a base (50) having a first wall (56) in the first side proximate to the first tube (28), the first wall (56) surrounding an opening associated with the first tube (28) and the first wall (56) sealing against the end of the housing (16) and the base (50) including a first material and the first wall (56) including a second material different than the first material and which is supported on the first material (50), the first tube (28) in fluid communication with the second side, and a second wall (54) on the first side engaging the end (12) and provided by the second material (54), the second wall (54) defining a boundary where the second wall (54) seals against the end (12) and the first wall (56) is unbounded, i.e. not connected, by the second wall (54) and the filter media (60) having a portion supported by the second side, the second wall (54) fluidly separated from the opening by the first wall (56) and the filter media (60) wherein the base is an end cap (50) of one material and the first wall (56) and the second wall (54) are seals of another material (see Figure 1; col. 3, line 13 – col. 5, line 42). The first wall (56) and a second wall (56) are circular seals and the base (50) is a end cap in Hodgkins (see col. 3, lines 46-63) wherein circular seals (50, 49a, 70) e.g. O-ring are made of resilient rubber or Duprene and the end cap (92) is made of sheet metal as evidenced by Thomas (US Patent No. 2,801,751) (see figure 2; col. 3, lines 43-51; col. 4, lines 68-72).

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Regarding claim 2, Hodgkins teaches that the first wall (56) is cylindrical and defines an aperture with an edge of the first wall (56) in sealing engagement with the end (12) of the housing (16) (see Fig. 1; col. 3, lines 49-55).

Regarding claim 3, Hodgkins teaches a hole (58) extending between the first and second sides and in fluid communication with the aperture and the opening (see Fig. 1; col. 5, lines 14-19).

Regarding claim 4, Hodgkins teaches that the second material (54, 56) defines at least a portion of the first side including the edge of the first wall (56)(see Fig.1 ).

Regarding claim 5, Hodgkins teaches a fluid filter assembly comprising: a housing (16) having an end (12) and defining a cavity; a first tube (28) supported by the end (12) and in fluid communication with the cavity; a diverter arranged within the cavity, the diverter extending along a longitudinal axis and including first and second sides with the first side proximate to the end (12), the diverter including a first wall (50, 56) on the first side proximate to the first tube (28) and in sealing engagement with at least one of the first tube (28) and the end (12), the first tube (28) in fluid communication with the second side via an opening (58), wherein the first wall (50, 56) is offset radially from the longitudinal axis and defines an aperture with an edge of the first wall (50, 56) in sealing engagement with the end (12) of the housing (16), wherein the diverter includes a first material (50) and a second material (56) secured to the first material (50), the second material (56) defining at least a portion of the first side including the edge of the first wall (50, 56), wherein the second material defines a side wall (54) spaced from the first wall (50, 56) and in engagement with the end (12) of the housing (16) wherein the first wall (50, 56) surrounding an opening associated with the first tube (28) and the filter media (60) having a

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portion supported by the second side wherein the first material (50) is of an end cap (50) of one material and the first wall (56) and the side wall (54) are circular seals of another material (see Figure 1; col. 3, line 13 – col. 5, line 42) as evidenced by Thomas teaching that circular seals (50, 49a, 70) e.g. O-ring are made of resilient rubber or Duprene and the end cap (92) is made of sheet metal (see figure 2; col. 3, lines 43-51; col. 4, lines 68-72).

Regarding claim 8, Hodgkins teaches that the housing (16) includes a case defining the end (12) and a cover (82) opposite the end secured to the case, the cover supporting a third tube (see passage in cover (82)) in fluid communication with the cavity and the filter media (60) arranged between the second (26) and third tubes (see Fig. 1).

Regarding claim 9, Hodgkins teaches that the base (50) supports the filter media (60) with the first wall (56) comprising a gasket (56) e.g. seal supported by the base (50), the base (50) extending radially outwardly beyond the filter media (60) (see Fig. 1).

Regarding claim 10, Hodgkins teaches a fluid filter diverter comprising first and second sides spaced from one another, a first material (50) and a second material supported on the first material (50), the second material defining at least a portion of the first side, the filter media (60) supported by the second side, the first side having a first wall (56) defining an enclosed aperture with a hole (58) extending from the enclosed aperture to the second side, and the second material providing the first wall (56) and a second wall (54), the second wall (54) on the first side and the hole (58) outside the second wall (54) (see Fig. 1; col. 3, line 13 – col. 5, line 42).

Regarding claim 12, Hodgkins teaches that the filter media (60) defines a central opening and the second side includes a center tube (62) provided by the first material at least partially within the central opening, the first material providing a base (50) with the filter media (60)



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secured to the base (50) and the center tube (62) extending from the base (50) to provide a unitary structure (see Fig. 1; col. 3, lines 56-63).

Regarding claim 13, Hodgkins teaches that the first wall (56) is cylindrical with an edge of the first wall (56) defined by the second material e.g. sealing material (see Fig. 1).

Regarding claim 24, Hodgkins teaches that the center tube (62) extends along the longitudinal axis and the hole (58) is offset radially from the longitudinal axis (see Fig. 1).

Regarding claim 26, Hodgkins teaches that an adhesive is arranged on the second side and the filter media (60) is embedded in the adhesive securing the filter media (60) to the second side (see Fig. 1; col. col. 3, lines 56-63).

Regarding claim 27, Hodgkins teaches that the first wall (56) is unbounded by the second wall (54) (see Fig. 1) wherein "unbounded" is interpreted as "not connected".

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hodgkins as applied to claim 10 above and further in view of Brown et al (US Patent No. 5,685,985). Hodgkins teaches the fluid filter diverter as described in above paragraph 4.

Regarding claim 11, Hodgkins teaches that the first material is of end cap (50) and the second material is of seals (54, 56) (see col. 3, lines 49-55). Claim 11 essentially differ from the filter diverter of Hodgkins in reciting that the first material is a plastic and a second material is an elastomer. Brown et al teach a fluid filter assembly comprising a second material supported on a

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first material wherein the first material is a plastic and the second material is an elastomer (see col. 5, lines 27-31). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the fluid diverter of Hodgkins with moldable material such as plastic as the first material for the end cap of Hodgkins and a sealable material such as rubber or elastomer as the second material for seals of Hodgkins since such materials are common in the filter art.

Regarding claim 15, Hodgkins teaches that second materials (54, 56) are mounted in concentric recesses formed on the end cap (see col. 3, lines 50-52). However, Hodgkins does not teach that the second material is adhered to the first material. Brown et al teach that the second material (50, 51) is adhered to the first material (44, 45) (see col. 5, lines 6-15). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the fluid diverter of Hodgkins to adhere the second material to the first material to firmly secure or attach the sealing gaskets to the end cap as suggested by Brown et al (see col. 5, lines 6-15).

7. Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hodgkins in view of Miller et al. (U.S. Patent No. 6,045,693).

Regarding Claim 6, Hodgkins discloses a fluid filter assembly comprising: a housing (16) having an end (12) and defining a cavity; a first tube (28) supported by the end (12) and in fluid communication with the cavity; a diverter arranged within the cavity and including first and second sides with the first side proximate to the end, the diverter including a first wall (56) in the first side proximate to the first tube (28) and in sealing engagement with the end (12) of the housing (16) wherein the first wall (56) defines an aperture with an edge of the first wall (56) in sealing engagement with the end (12) of the housing (16), wherein the diverter includes a first



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material (50) and a second material secured to the first material, the second material defining at least a portion of the first side including the edge of the first wall (56); wherein the first wall (56) surrounding an opening associated with the first tube (28); and a filter media (60) having a portion supported by the second side. However, Hodgkins does not disclose a second material defining a central wall extending away from the first wall and in engagement with the end of the housing. Miller et al teach a fluid filter assembly comprising a first material (37) and a second material (132) secured to the first material (37) (see Fig. 11) wherein the second material defines a central wall between pockets (146) extending away from the first wall e.g. annular ring (143). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the second material of Hodgkins with a central wall extending away from the first wall between pockets of Miller et al in the fluid filter assembly of Hodgkins to permit a weight and material reduction to lower the cost of the fluid filter assembly as suggested by Miller et al (see col. 10, lines 32-45).

Regarding Claim 14, Hodgkins discloses a fluid filter diverter comprising: first and second sides spaced from one another; a first material (50) and a second material (54, 56) supported on the first material (50), the second material defining at least a portion of the first side; and a filter media (60) secured to the second side, the first side having a first wall (56) defining an enclosed aperture with a hole (58) extending from the enclosed aperture to the second side, and the second material defining at least a portion of the first wall (56), wherein the second material defines a side wall (54) spaced from the first wall (56). However, Hodgkins does not disclose a second material defining a central wall arranged between the first wall and the side wall. Miller et al teach a fluid filter assembly comprising a first material (37) and a

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second material (132) secured to the first material (37) (see Fig. 11) wherein the second material defines a central wall between pockets (146) (see Fig. 16) and between the first wall e.g. annular ring (143) and the side wall around the central portion (145). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the second material of Hodgkins with a central wall between pockets and between the first wall and the side wall of Miller et al in the fluid filter diverter of Hodgkins to permit a weight and material reduction to lower the cost of the fluid filter assembly as suggested by Miller et al (see col. 10, lines 32-45).

8. Claim 25 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Applicant's arguments with respect to claims 1-6, 8-15 and 24-27 have been considered but are moot in view of the new ground(s) of rejection. Applicant argues that Hodgkins patent does not disclose that the second material is different than the first material. Thomas shows that the second material is different from the first material as an evidence provided teaching that circular seals (50, 49a, 70) e.g. O-ring are made of resilient rubber or Duprene and the end cap (92) is made of sheet metal (see figure 2; col. 3, lines 43-51; col. 4, lines 68-72). Also, claims 5-6, 10, 12-15 and 24-27 do not claim that the second material is different from the first material. Applicants have not provided reasons why neither Brown nor Miller does not disclose the subject matter present.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kim whose telephone number is 571-272-1142. The examiner can normally be reached on Monday-Friday 7 a.m. - 3:30 p.m..

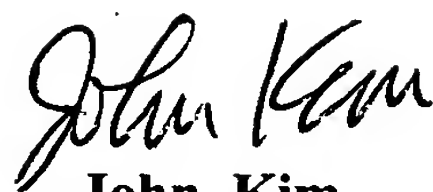
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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A handwritten signature in black ink, appearing to read "John Kim".

**John Kim**  
**Primary Examiner**  
**Art Unit 1723**

JK

6/7/07